

## **CoPs- future or return to the past- a sceptical approach**

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### **Introduction**

A dynamic and constant change, characteristics of the existent paradigm, imposes that organizations assume as an imperative the need to be adaptable and evolutionary, flexible in their operations, without losing their technological and human structure (Davenport and Prusak, 1998). In that sense, the need to capture, to apprehend, to develop ideas and know-how has been discussed thoroughly by academics and managers worldwide.

With such scenario, the need for organizational innovations increases dramatically, being communities of practices one of the possible answers. Their purpose is then to complement the existing structures and to galvanize in a radical way the creation and share of knowledge, generating learning and change inside the organization. However, in spite of appearing as an answer to the organizational environment, the truth is that, through out mankind history the expression “communities of practices” can be apply; and that is an unquestionable reality.

For that, it is enough to recall ourselves of the first men communities, the first sedentary communities, the great classic civilizations, the feudalism of the Medium Age, the renascent communities, the industrial communities (pos Industrial Revolution), and finally, the communities of practices. However, those communities present diverse analytical dimensions, concerning it's: creation aim, leadership/hierarchical structures and knowledge sharing process.

## **Conceptual background**

The characteristics of the business environment clearly demonstrate that workers need to be able to adapt to new skills and processes and to update their knowledge on a regular basis. In fact, the idea pointed out in the book *Empresas, caos e complexidade-gerindo à beira de uma ataque de nervos* (Pina e Cunha, Fonseca and Gonçalves, 2001), supplies generic elements that, somehow, we can take as references about the origin and real vocation of the communities of practices.

Organisations are increasingly dealing with the problem of creating, sharing and managing knowledge in order to adapt itself to the changing environment, as well as, they are transforming into learning organisations and expect their workers become lifelong learners. In a learning organisation, workers are stimulated to share and develop knowledge together.

The learning potential of expertise networks has become a matter of interest and social and cultural aspects of learning have become important to understand and foster their learning (Brown and Duguid, 1996; Davenport and Prusak, 1998; Qureshi, 2000; Wenger and Snyder, 2000; Fontaine and Millen, 2004). In organisations workers tend to form networks of expertise to facilitate individual learning, collaboration and to discuss work related problems together. However, in some specific situations these networks become communities of practices (see bellow).

On the other hand, we should not forget the formidable increase of all types of human organizations, existing evidences that the human organizations are complex systems. Kaufman (Kaufman, 1995) defines a complex adaptable system as an organizational unit that it intends to preserve his identity and integrity, which means for guarantee its survival, it is “forced” to interpret an amount of information superior to his processing capacity, given the variety and the amount of present information in the involving environment.

However, if we consider communities of practices features (see communities of practices dimension); it is possible to acknowledge an organization as a conversational network, which is extremely useful regarding the existent business environment. But, how can we define communities of practices? Initially, it will be very useful to

understand the concept “community”, because some authors agree on the uncertainty of its meaning (Paccagnella, 2001). According to Cardoso (1998), a community arises when individuals' are organized in groups due to the physical, social and cultural environment. And we must not forget the technological element.

These definitions transmit us that human beings constitute communities with a survival sense. It is the interaction in the communities that makes knowledge appears. Over time, this collective learning results in practices that reflect both the pursuit of our enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of a share enterprise. It makes sense, therefore to call these kinds of communities: communities of practices (Wenger, 1999).

In fact, early research on communities of practice has its roots in situated learning theory in ethnographic studies of work practices (Orr, 1996; Lave and Wenger, 1991). Definitely known is the research done by Julian Orr in relation to the Xerox service technicians. Orr observed that there was a variance between the organization's formal description of work and the way in which the actual work was performed (Orr, 1996). When these technicians were faced with problems for which the formal structure often did not provide solutions, they relied on the organization's informal systems for help, such as story-telling, conversation, mentoring, and experiential learning.

In so doing, these individuals formed communities of practice, a term introduced by Lave and Wenger in 1991 and defined in the following way: “a community of practice is a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the intrinsic support necessary for making sense of its heritage. Thus participation in the cultural practice in which any knowledge exists is an epistemological principle of learning. The social structure of this practice, its power relations, and its conditions for legitimacy define possibilities for learning” (Lave and Wenger, 1991: 98).

As a final remark, it is possible to introduce other definitions for communities of practices, such as the one of Gherardi et al. (1995), which advocates that communities

of practice are defined as the grouping of people who belong to the same occupational group and who through their common experience of work create a culture, a language and rites, as well as, practical routines, technical knowledge and coping strategies- all aspects which can be summed up in the word “practices”.

### **Communities of practices dimensions**

According to Wenger and Snyder (Wenger and Snyder, 2000), a community of practice is defined itself along three dimensions: what it is about? How it functions? What capability it has produced? So, two types of communities of practices exist: the self-organized and the sponsored ones.

Self-organized communities of practices are self-governing as well. They pursue the shared interests of the group’s members. These communities of practices add value to a company by sharing lessons learned, acting as distribution points for best and emerging practices, providing forums in which issues and problems can be raised and resolved and, in general, by learning from each other. Owing to their voluntary, in-formal nature, self-organizing communities of practices are fragile yet extremely resilient. They are fragile in their attempts to manage or control the group members disbanding or going “under-ground”, instead of sharing their expertise and knowledge more broadly. They are extremely re-silient, which means that members come and go as interests and issues shift and evolve. Over time, they adapt or may even evolve into a formal or sponsored community of practices. Or, they might disband if enough of the members decide they are no longer deriving any benefit from their membership.

Sponsored communities of practices are initiated, chartered, and supported by management. This kind of communities is expected to produce measurable results that benefit the company. They get needed resources and they have more formal roles and responsibilities. Even so, they are much more self-governing and wide-ranging than the typical cross-functional project team.

However, the proliferation of similar concepts as teams, sometimes leads to confusion; in that sense, to distinct such concepts is important. Storck and Hill (2000) suggest that the differences between the two constructs can be characterized through the following

analytical points: relationship through the members; authority relationships; goals; processes; and legitimization process.

Regarding the relationship of its members on teams these are established when the organization assigns people, but on communities of practices these are formed around practice. Within teams the authority relationships are organizationally determined, and in a community of practices naturally emerge through the interaction around expertise. Relatively to aims to be achieved these are imposed to teams, because are often established by people not on the team due to their sponsoring, however communities are only responsible by their members due to their self-organizing.

On the other hand, if we analyze their processes we conclude that teams rely on work and reporting processes organizationally defined, and communities develop their own processes. And finally, the legitimization process of teams is legitimized principally through the assignment of formal roles and relationships (team membership and structure are defined external to the team), but communities of practices establish their legitimacy through interaction about their practice.

### **Analytical time comparison**

After analysing the concept of communities of practices and its dimensions, the natural step is to compare the evolution of such organizational structures through time. For that, we will distinguish the following items: their aim; their hierarchical structure/leadership; and obviously, to investigate about their behaviour concerning knowledge sharing.

The first men communities (considering the evolution of the human species- from the Homo erectus to the Homo sapiens sapiens), undoubtedly presented a single objective, to guarantee survival, easily demonstrated through the relationship Humanity versus Nature. At this time the influence of men on Nature was practically null, and a strong indicator that survival was the only purpose of the communities' life is the natural division of work, in that hunting and fishing activities were attributed to men and collecting fruit belonged to women. Beside those other activities are not known.

In this period, the behaviour rules were clearly imposed by a leader, which was the strongest and the wisest. Considering the aggregation of the preceding factors, knowledge sharing was mainly practical.

With the coming of sedentary life style, the relationship between Nature and mankind was deeply changed. What started as a one way relationship was transformed into cause/consequence relationship, due the men's actions. In spite of this radical change the primary objective stayed intact, as well as, the characteristics of knowledge sharing.

But, why analyse such communities? Sedentary life determined once again that knowledge sharing was mainly practical, which means that no differences arise... However, during this historical period the hierarchical structure changed, motivated by the land ownership, given origin to the first social division of work.

Later on, in the classic civilizations, the continuous economical specialization promoted the birth of associations, what engaged the need for a "code of practices" inside such organizations. An example of such situation was the specific norms drawn out for each craft, such as: the admission process, and the characteristics of the craft and its raw materials. On the other hand, the authority relationships were related to the domain of micro-sociological analyses, which means, in spite of a leader's existence (usually the "artisan" with most prestige or influence), it implicates the adhesion to a norm or common norms.

Knowledge sharing process is still based on practice, because usually the profession passed through several generations. But, if someone tried to learn a specific craft is initially considered a dependent apprentice of the profession. In fact, only after a long learning period it becomes a master. Regarding the aim of such communities, it is once again related to survival, because associations tried to guarantee stability, to defend their members, to struggle against the lack or excessive abundance in the market and to regulate work, which means, guaranteeing the survival of the activity implicates the whole community's survival.

Similar to the previous communities we have the feudal communities. However, such claim will definitely create a debate, because how it is possible that two completely

different social structures may engage similarities? Well, the feudal communities incorporate in itself the whole type of economical activities, and the process of knowledge sharing is exactly the same, however it is in the hierarchical structure that the differences appear. The leader stops being the most influential “artisan” or the one with bigger prestige, to become the lord of the feud, because it defines and regulates the whole life of the community. On the other hand, the survival intention is the primordial reason of the existence of the feudalistic regime. The enunciated reality is demonstrated in the following point.

In the relationships of feudal type, the content and the functions are far more complex. The “customer”, seeks economical, physical or other form of safety, being ready to obtain it, and to resign its independence. His acceptance allows a kind of affectivity into the social interaction. On the other hand, the lord has a considerable power, and through its dominance economical advantages arise.

Later, during the period of the Renaissance the bourgeoisie arise as a consequence of the increasingly commercial exchanges. It was also during this period that corporations “born”... Such organizational structures are based in an authority relationship, which means that the traditional micro-sociological domain of analysis is explored again. Free consent engages the basis of such organizational structure; at least, it supposes a partial agreement given the bond to a norm or common norms. If we adopt a sociological analysis, it is possible to understand the complexity of its relationships, given the fact that it allows exercising power effects. Per times it is specified that one of the participants will make the decisions for the group and the agreement is obtained given a certain principle. In the prosecution of the common principles, it is frequent to conjugate economical efforts.

Regarding the industrial communities (pos Industrial Revolution), it invigorates the capitalist as the community's generic leader's. In this kind of organizational structures, education supports an essential role, namely in the second half of the XX century. Given that, the first difference is verified regarding knowledge sharing, that is, the practical learning is replaced by purely theoretical learning.

Relatively to the communities of practices the leader appears in certain contexts and is not always the same. In terms of knowledge sharing, communities of practices present characteristics similar to eastern societies regarding the importance of wisdom and knowledge accumulated during life experience. On the other hand, while an answer to organizational evolution, these can be decisive for the survival of the organization, for that, once again it is demonstrated that the initial objective of survival stays.

Finally, and having in consideration the social networks analysis we can conclude that, in a generic way the several types of communities present:

- the communities' existential objective stayed, that is, to assure the individuals' survival, although in the practical communities it is mainly in organizational contexts;
- the hierarchical structure/leadership verified an incredible amount of changes, that is, started though biological reasons (the oldest possessed larger experience and wisdom), similar to what happens in the animal kingdom; the next step was lands ownership; later, besides land ownership the social condition emerged (feudalism); during the industrial revolution leadership occurs through capital;
- the knowledge sharing process emphasis was practical until the industrial revolution, namely until the XX century. From that moment on, namely in the western society theoretical knowledge was privileged. However, communities of practices seem to represent a return to practical knowledge.

### **Communities of practices dilemmas**

In spite of being a successful methodology in several domains, such as the fast resolution of problems, sharing best practices and the development of professional competences (Martin, Hatzakis and Lycett, 2004), the communities of practices can present low levels of success or even paradoxes in the following areas (Hislop, 2004): definition of strategies; definition of new businesses; recruitment and maintenance of talents; knowledge sharing. Such paradox arises because communities of practices need to claim a different formulation, which appeals to the contributors in a wider spectrum.



In fact, the risk of excessive specialization, particularly in the areas of definition of strategies and definition of new businesses can narrow the field of hypothesis to consider, harming the intended aim. Contributors of several areas, even outsiders, will be able to be sensitive to a different group of signs, that could always be there and that are announcers of what Andrew S. Grove designates as an strategic inflection point, “the risky transition between the old and the new way of doing business” (Grove, 1998).

The paper of the outsiders can be seen has an extent of new visions “suppliers”, given that usually the communities of practices members are so absorbed (“addicts”) into the same logical approach, that they are abstracted of other points of view that can be the key for success. How many times, the experience demonstrates us, in so obvious ways that if you are out you see all: the “Eggs of Columbus” of the organizations.

It adds to the referred risk of success of the communities of practices, the recruitment possibility and maintenance of talents, on the part of these informal structures, at least potential, corporate tendency, which means, more affirmation will probably reinforce their contributions in this domain. Behaving in that normalization process, the denial of these communities' virtues, while reading instruments and alternative analysis to the formal structures of the companies, in last analysis, may transform these communities into lobbies in the organizational context. In the limit, those lobbies could adopt an information conditioning behaviour in such a way that her strategic position it will be defended (defensive mechanism).

At last, for a rich cross community knowledge exchange is essential that virtually no effective mechanisms for exchanging cross community knowledge appear (Brown and Duguid, 1998), as well as, requires building a culture of trust (Ackerman, Pipek and Wulf, 2003). The consequences are that knowledge becomes as divided as the functional silos that produce it (Denison, Hart and Kahn, 1996). For example, Ford's knowledge initiatives, based upon functional communities, delivered cost savings but did not prevent the Firestone Tyre debacle.

Knowledge within each community of practice becomes ‘sticky’. According to Szulanski (2003) knowledge stickiness fall into two categories: motivational barriers

and knowledge barriers. However, Ackerman, Pipek and Wulf (2003) plead a different set of categories: motivational and cognitive barriers.

Cognitive limitations are related to the way experts store and process information, impeding them to share that expertise with others regardless of whether or not they are motivated to do so. The cognitive limitations faced by experts come partly from the way that they mentally represent the task, as expertise increases, mental representations become more abstract and simplified. Motivational limitations are related to the appraisal and reward systems of most companies, as well the internal competition between individuals, teams and units.

Moreover, Davenport and Prusak (1998) points out cultural factors also as a barrier. However, it seems that the right “framework” must join all these analysis, similar to the work of Hildreth and Kimble (2004) that sets for major barriers:

- awareness: making seekers and sources aware of their respective knowledge;
- access: providing the time and space for seekers and sources to connect with one another;
- application: ensuring that the knowledge seeker and source have a common content and understanding necessary to share their insights;
- perception: creating an atmosphere where knowledge sharing behaviours between seekers and sources are respected and valued.

Of course, the evidenced fears considering the deterioration of communities of practices, in opposite sense have to be appraised also in a historical and national culture framework where such strategies are being developed. After such conceptual framework the arising question is: are these problems just related to communities of practices or along the history they did also exist?

### **Future trends**

Future work in this field of research is the definition of strategies in order to minimize the referred dilemmas, because a lack of theoretical background is considerable. Such

work is urgent, given the multiple applications of communities of practices at an organizational and society level.

On the other hand, this lack of theoretical background affects also the aim of this contribution, because it doesn't allow a comparison work. In that sense, academics, researchers and managers involve in communities of practices projects should try to engage an analytical perspective regarding their aim; hierarchical/leadership structure and knowledge sharing process.

## **Conclusion**

Considering the analytical background it is possible to acknowledge enormous similarities between other types of communities and communities of practices. Such similarities could emerge in the reader's mind some interrogations concerning communities of practices nature and their assumptions. Moreover, while as a solution for organizational innovation and its results, makes possible to acknowledge an affirmative answer to the "research" question, which means they represent a return to the past.

However, it is a fact that differences are recognized, and for that, we have to consider that is not a return to a "genuine" past. Those differences should be considered important, as for instance: the one that results of the property relationship with the organizations; and the one that concerns knowledge sharing process.

In conclusion, the competitive improvements in the future will come from learning and from a better use of the available resources, as well as, to know how to begin, to support and to sustain processes that promote learning. In fact, all those that can be partners in the construction of systems and necessary structures for organizational learning, will play a decisive role in substantiating competitive advantages.

However, other authors defend that such point is not necessarily true, because sometimes this process could be engaged through out mergers and acquisitions, which embraces tremendous cultural problems.

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### **Key terms**

**Organizational innovations-** Organizational innovation reflects the recognition that new ways of organizing work in areas such as work-force management, knowledge

management, value chain management, customer partnership, distribution, finance, manufacturing, etc. can improve your competitiveness.

**Community-** individuals' group that is organized around a physical, social, cultural and technological atmosphere.

**Communities of practices-** community of people belonging to the same professional group professional, as which create a culture, language and rituals.

**Survival-** inherent characteristic of all animals and that relatively to Mankind is associated to community's concept.

**Leadership-** a certain individual's capacity in leading a group or community, fruit of his innate capacities or conjugation of external elements.

**Knowledge transmission-** process for which experience is transmitted. This process can present the following characteristics: mainly practical, theoretical or a mix of both.

**Outsiders-** external elements that plead new ideas, which don't appear to the group due to the daily approach of the subjects in analysis.